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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/621,392	07/18/2003	Hung-Chou Tsai	GIA 199	2466

7590 10/14/2005	EXAMINER
RABIN & BERDO, P.C.	FLOURNOY, HORACE L
Suite 500	

1101 14th Street, N.W.	ART UNIT	PAPER NUMBER
Washington, DC 20005	2189	

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/621,392	TSAI ET AL.
	Examiner	Art Unit	
	Horace L. Flournoy	2189	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 July 2003*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claims 1-31 are presented for examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 recites "...configuration of a signal..." The specification does not enable one of ordinary skill in the art to know how to "attach importance" to something. In other words, what is the "configuration of a signal" doing? How is the configuration happening?

The examiner reminds the applicant that this "configuration of a signal" must be explained in the specification as originally filed, in accordance with 35 USC § 112, 1st paragraph.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3 and 4 recite the limitation "stored in the buffer" in line 2 of claims 3 and

4. There is insufficient antecedent basis for this limitation in the claim. Claim 1 recites,

"...stored in the temporary data storage area..." in lines 8-9.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Oishi

(U.S. PG Pub No. 2003/0225971 hereafter referred to as Oishi).

With respect to independent claim 1,

"A portable data storage device adapted to couple with an electronic apparatus

for said electronic apparatus to automatically execute and play an internal file

stored in said portable data storage device," is disclosed in paragraphs [0007]

and [0012] and FIG. 1, elements 11 and 17.

Oishi discloses in paragraph [0007], "a portable-type writable medium..." Oishi further discloses in paragraph [0012], "...a USB storage device which is capable of being attached to and detached from an external device..." Oishi recites in paragraph [0040], "A host 11 as an external device is a widely known personal computer..." Oishi also discloses in paragraph [0064], "the specified software can be automatically executed when the USB storage device 17 is attached to the host 11."

Oishi teaches a portable data storage device (a portable-type writable medium/USB storage device) adapted to couple with an electronic apparatus (capable of being attached to and detached from an external device - personal computer) for said electronic apparatus to automatically execute and play an internal file stored in said portable data storage device (the specified software can be automatically executed when the USB storage device 17 is attached to the host 11).

"...comprising: an interface unit for coupling with a processing unit of said electronic apparatus;" is disclosed in paragraph [0004] and FIG. 1 elements 11 and 19.

Oishi discloses in paragraph [0004], "These days, attachable and detachable USB storage devices, each of which comprises an installed flash memory and an interface according to the USB (Universal Serial Bus) standard...are widely known..."

Oishi teaches an interface unit (USB interface, element 19) for coupling with (USB bus, element 16) a processing unit of said electronic apparatus (Host, element 11).

"...a flash memory into and from which data can be written and read;" is disclosed in paragraph [0047] and FIG. 1, element 25.

Oishi discloses in paragraph [0047], "The memory control unit 21a performs reading, writing and deleting data to and from a flash memory 25."

"...and a control unit located between and coupled with said interface unit and said flash memory to control input and output of data into and from said flash memory;" is disclosed in paragraph [0047] and FIG. 1, element 21.

Oishi discloses in paragraph [0047], "The controller 21 corresponding to control means is provided with a memory control unit 21a, a USB interface control unit 21b, a memory information storage 21c and an LED control unit 21d. The memory control unit 21a performs reading, writing and deleting data to and from a flash memory 25."

"...said portable data storage device being characterized in that said flash memory includes at least one predetermined segment particularly divided to set as a compact-disk (CD) device and to store said internal file; said CD device including a start program adapted to cause said processing unit of said electronic apparatus to detect via said control unit a virtual CD-ROM in said CD device, and thereby locate said start program automatically execute and play said internal file." is disclosed in paragraph [0103].

The examiner interprets the limitation "flash memory includes at least one predetermined segment particularly divided to set as a compact-disk (CD) device..." as an area of the flash that is used for the compact disk functions.

Oishi discloses in paragraph [0103], "Since application software for the host 11 to handle the data to be printed is previously contained in the area with logical unit number "1" of the flash memory 25 (the CD-ROM area), the host 11 can use the application software without containing the same in itself by reading out from the CD-ROM area of the flash memory 25." Oishi further discloses in paragraph [0064] Windows.TM. has the function of executing the application software specified in a file named "autorun inf" stored in the root directory of a storage medium when the storage medium is inserted or connected. Accordingly, in the case where the file is stored in the area of the flash memory 25 assigned logical unit number "1," the specified software can be automatically executed when the USB storage device 17 is attached to the host 11."

With respect to claims 2 and 11,

> "The portable data storage device as claimed in claim wherein said interface unit includes a universal serial bus (USB) plug coupling with a corresponding USB socket on said electronic apparatus." is disclosed in paragraph [0064] and FIG. 1, elements 11, 16, 19.

Oishi also discloses in paragraph [0064], "the specified software can be automatically executed when the USB storage device 17 is attached to the host 11."

With respect to claims 3, 12, 22, and 27,

"The portable data storage device as claimed in claim wherein said start program

includes auto-execution file and an application having driving mechanisms for

playing said internal file."" is disclosed in paragraph [0064].

Oishi discloses in paragraph [0064] Windows.TM. has the function of executing

the application software specified in a file named "autorun inf" stored in the root

directory of a storage medium when the storage medium is inserted or connected.

Accordingly, in the case where the file is stored in the area of the flash memory 25

assigned logical unit number "1," the specified software can be automatically executed

when the USB storage device 17 is attached to the host 11.

With respect to claims 4, 5, 13, 14, 23, 24, 28, 29

"The portable data storage device as claimed in claim 3, wherein said driving

mechanisms of said application sequentially include:

copying said internal file from said predetermined segment to another segment of

said flash memory;" is disclosed in paragraph [0047].

"...starting a corresponding program to play said copied internal file;" is disclosed

as stated supra in paragraph [0064].

"...and deleting said copied internal file after completion of playing of said copied internal file." is also disclosed in paragraph [0047].

Oishi discloses in paragraph [0047], "The memory control unit 21a performs reading, writing and deleting data to and from a flash memory 25. The USB interface control unit 21b controls the respective regions of the USB interface 19 mentioned above. The controller 21 includes a program storage (not shown) containing a program for operating the memory control unit 21a, the USB interface control unit 21b and the LED control unit 21d. The memory information storage 21c stores information about areas of the flash memory 25.

Oishi teaches copying an internal file from a predetermined segment to another segment of flash memory (reading and writing data to *and* from a flash memory area). Oishi therefore teaches copying an internal file from a segment (area) of flash memory to the storage unit of the electronic apparatus (host). Oishi also teaches deleting said copied internal file after the completion of playing the copied file. Note: Oishi recites in paragraph [0047] "The controller 21 corresponding to control means..." The examiner notes that since the control means controls the functions of reading, writing, and deleting to and from the flash memory device, these functions can be executed in an order that corresponds to claim 4. Also included in this order is the automatic execution (or starting) of the program to play a copied file as stated supra.

With respect to claims 6, 15, 25, and 30,

> "The portable data storage device as claimed in claim 3, wherein said auto-
> execution file further includes an icon instruction and an icon file representing
> said portable data storage device, so as to automatically display a designated
> icon in an operating system of said electronic apparatus to represent said
> portable data storage device." is disclosed in paragraph [0041].

Oishi discloses in paragraph [0041], "The operation system 12 is software that
comprehensively controls the host 11, such as Windows.TM. and Mac OS X.TM."

The examiner notes that operating systems Windows TM. And Mac OS X
inherently have icon instruction and an icon file representing said portable data storage
device, so as to automatically display a designated icon in an operating system of said
electronic apparatus to represent said portable data storage device.

With respect to claims 7 and 16,

> "The portable data storage device as claimed in claim 1, wherein said control unit
> comprises a microcontroller." is disclosed in paragraph [0047].

Oishi discloses in paragraph [0047], "The controller 21 corresponding to control
means is provided with a memory control unit 21a, a USB interface control unit 21b, a
memory information storage 21c and an LED control unit 21d. The memory control unit
21a performs reading, writing and deleting data to and from a flash memory 25."

Oishi teaches a control unit (memory control unit 21a) to do necessary management and control of the flash memory (performs reading, writing and deleting data to and from a flash memory).

With respect to claims 8 and 17,

"The portable data storage device as claimed in claim 7, wherein said micro controller includes a read-only memory for recording a control program thereon." is disclosed in paragraph [0005].

Oishi discloses in paragraph [0005], "Most of these USB storage devices are provided with a physical switch, such as a write protect switch, to prevent the software from being deleted by mistake. By changing the switch, switching between the state in which reading, writing and deleting is possible and the state in which only reading is possible is available. In some cases an inherently unwritable memory, such as a ROM, is used to completely prevent writing and deleting."

With respect to claims 9 and 20,

"The portable data storage device as claimed in claim 1, wherein said internal file is selected from a group consisting of image files, picture files, word data files, protection programs, service programs, other programs and drivers thereof, and

auto installation programs, and combinations of any two or more items thereof."

is disclosed in paragraph [0022].

The examiner notes that a portable data storage device as claimed in claim 1

(using a flash memory) is inherently capable of storing internal files such as image files,

picture files, word data files, protection programs, service programs, other programs

and drivers thereof, and auto installation programs. Furthermore, a flash memory

device such as the one claimed in claim 1 can also store combinations of two or more

file types.

Oishi discloses in paragraph [0022], "Although the printing means is taken as an

example of output means for performing output based on some data, and the scanner

means is taken as an example of input means for performing input based on some data,

output means or input means is not limited to the printing means or the scanner means.

For example, output means may be display means for displaying based on display data

or sound output means for outputting sound based on sound data, and input means

may be operation information input means for inputting operation information about

operation by a user or sound input means for inputting sound data. Furthermore, the

USB storage device may have both input means and output means."

With respect to claim 10,

"A portable data storage device adapted to couple with an electronic apparatus

for said electronic apparatus to automatically execute and play an internal file

stored in said portable data storage device, comprising:

an interface unit for coupling with a processing unit of said electronic apparatus;"

is disclosed as stated supra in claim 1.

"a flash memory into and from which data can be written and read; and" is

disclosed as stated supra in claim 1.

"a control unit located between and coupled with said interface unit and said flash

memory to control input and output of data into and from said flash memory;" is

disclosed as stated supra in claim 1.

"said portable data storage device being characterized in that said flash memory

being divided into a first, a second, and a third segment; said first segment being

set as a CD device having a start program, said second segment being a general

read/write segment, and said third segment being used to store said internal file;"

is disclosed in paragraphs [0024], and [0025].

The examiner interprets the limitation "flash memory being divided into a first, a

second, and a third segment" as the flash memory having areas or segments for

functions of one segment for a CD device, another read/write segment, and another

segment used to store an internal file.

Oishi discloses in paragraph [0025], "It is preferable that the storage means stores, in the second area..." Oishi also discloses in paragraph [0024], "It may also be possible for the external device to write printing data to the first area of the storage means and make the printing means perform printing based on the written data. It may further be possible for the scanner means to make image data read by the scanner means stored in the first area of the storage means and for the external device to read the image data stored in the first area and process the read data." Note: Oishi teaches an area of flash memory set as a CD device having a start program stated supra in claim 1.

"...and said processing unit of said electronic apparatus being caused to detect via said control unit a virtual CD-ROM in said CD device, and thereby locates said start program to automatically execute and play said internal file." is disclosed as stated supra in claim 1.

With respect to claims 18 and 31,

"The portable data storage device as claimed in claim 10, wherein said third segment of said flash memory is a hidden segment that could not be read by users" is disclosed in paragraph [0048].

The examiner interprets the limitation "hidden segment that could not be read by users" as a segment or area of the flash memory that cannot be read i.e. written to or deleted from as opposed to being seen or viewable.

Oishi discloses in paragraph [0048], "As shown in FIG. 2, the memory information storage 21c includes areas for logical unit numbers 31, formats 33, writing/deleting allowed/not allowed flags 35, logical block numbers 37 and physical block numbers 39."

Oishi teaches a third segment of said flash memory (area) is a hidden segment that could not be read by users (writing/deleting not allowed flag).

With respect to claim 19,

"The portable data storage device as claimed in claim 18, wherein said hidden segment has a password pre-recorded therein, and said control unit is adapted to decrypt and compare an input password with said pre-recorded password to determine whether data may be read from or written into said hidden segment." is disclosed in paragraph [0089].

Oishi discloses in paragraph [0089], "A text box 59 is a text box for inputting a specific ID. The specific ID is not defined according to the USB standard, but is specific to the USB storage device 17 of the present embodiment. The specific ID may be used as a license key to prevent unauthorized starting of a content by using an unauthorized copy or the like, and may be used for an authentication key or for member services as

well. The specific ID is hexadecimal data of 16 bytes or more and 612 bytes or less.

The operation screen 51 is designed such that when up and down buttons at the right

end of the text box 59 are pressed, data unable to be indicated at one time is

sequentially indicated in the text box 59."

Oishi teaches a hidden segment has a password pre-recorded therein (specific

ID to the USB storage device), and said control unit is adapted to decrypt and compare

an input password with said pre-recorded password to determine whether data may be

read from or written into said hidden segment (The specific ID may be used as a license

key to prevent unauthorized starting of a content by using an unauthorized copy or the

like, and may be used for an authentication key or for member services as well).

With respect to independent claim 21,

"A method of automatic execution of a portable data storage device, comprising

the following steps:

coupling an interface unit of said portable data storage device with a processing

unit of an electronic apparatus, so as to cause said processing unit to detect a

virtual CD-ROM in a CD device set in a predetermined segment of a flash

memory of said portable data storage device; and" is disclosed stated supra in

claim 1.

"...causing said processing unit of said electronic apparatus to locate via a

control unit of said portable data storage device a designated start program in

said virtual CD-ROM, and to automatically execute and play an internal file

stored in another predetermined segment of said flash memory of said portable

data storage device." is disclosed in paragraph [0103].

Oishi discloses in paragraph [0103], "Since application software for the host 11 to

handle the data to be printed is previously contained in the area with logical unit number

"1" of the flash memory 25 (the CD-ROM area), the host 11 can use the application

software without containing the same in itself by reading out from the CD-ROM area of

the flash memory 25." Oishi further discloses in paragraph [0064] Windows.TM. has the

function of executing the application software specified in a file named "autorun inf"

stored in the root directory of a storage medium when the storage medium is inserted or

connected. Accordingly, in the case where the file is stored in the area of the flash

memory 25 assigned logical unit number "1," the specified software can be

automatically executed when the USB storage device 17 is attached to the host 11."

With respect to independent claim 26,

"A method of automatic execution of a portable data storage device, comprising

the following steps:

coupling an interface unit of said portable data storage device with a processing

unit of an electronic apparatus, so as to cause said processing unit to detect a

virtual CD-ROM in a CD device set in a first segment of a flash memory of said

portable data storage device; and" is disclosed stated supra in claim 1.

"...causing said processing unit of said electronic apparatus to locate via a

control unit of said portable data storage device a designated start program in

said virtual CD-ROM, and to automatically execute and play an internal file

stored in a third segment of said flash memory of said portable data storage

device." is disclosed in paragraph [0103].

Oishi discloses in paragraph [0103], "Since application software for the host 11 to

handle the data to be printed is previously contained in the area with logical unit number

"1" of the flash memory 25 (the CD-ROM area), the host 11 can use the application

software without containing the same in itself by reading out from the CD-ROM area of

the flash memory 25." Oishi further discloses in paragraph [0064] Windows.TM. has the

function of executing the application software specified in a file named "autorun inf"

stored in the root directory of a storage medium when the storage medium is inserted or

connected. Accordingly, in the case where the file is stored in the area of the flash

memory 25 assigned logical unit number "1," the specified software can be

automatically executed when the USB storage device 17 is attached to the host 11."

Conclusion

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Horace L. Flournoy whose telephone number is (571) 272-2705. The examiner can normally be reached on Monday-Friday 7:00 AM to 4:30 PM (ET).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Sparks can be reached on (571) 272-4201. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 746-7239

Information regarding the status of an Application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or PUBLIC PAIR. Status information for unpublished applications is available through Private Pair only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Horace L. Flournoy

Patent Examiner

Art unit: 2189

CHRISTIAN CHACE
PRIMARY EXAMINER

Primary Patent Examiner

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